

What is claimed is:

1. An electric rotating machine for a vehicle comprising: a rotor core that is fitted to a rotary shaft; a stator core that is concentric with said rotor core and disposed on the outside of said
5 rotor core; and a turning angle detector that is disposed at one shaft end of said rotary shaft;

wherein said rotary shaft itself is constituted to be magnetic flux interrupting means made of a non-magnetic material.

2. An electric rotating machine for a vehicle comprising: a
10 rotor core that is fitted to a rotary shaft; a stator core that is concentric with said rotor core and disposed on the outside of said rotor core; and a turning angle detector that is disposed at one shaft end of said rotary shaft;

wherein a portion extending from a mounting part on the rotor
15 side to the shaft end and constituting the turning angle detector of said rotary shaft is constituted to be shaft-shaped magnetic flux interrupting means made of a non-magnetic material instead of the rotary shaft portion, and said magnetic flux interrupting means is integrally formed with the rotary shaft by press fitting or welding.

20 3. An electric rotating machine for a vehicle comprising: a rotor core that is fitted to a rotary shaft; a stator core that is concentric with said rotor core and disposed on the outside of said rotor core; and a turning angle detector that is disposed at one shaft end of said rotary shaft;

25 wherein a part of a rotor side member constituting said turning angle detector is constituted to be magnetic flux interrupting means made of a non-magnetic material.

30 4. The electric rotating machine for a vehicle according to claim 1, wherein a high-permeability magnetic bypass member is disposed between said rotor core and said turning angle detector.

5. The electric rotating machine for a vehicle according to
claim 2, wherein a high-permeability magnetic bypass member is
disposed between said rotor core and said turning angle detector.

6. The electric rotating machine for a vehicle according to
5 claim 3, wherein a high-permeability magnetic bypass member is
disposed between said rotor core and said turning angle detector.

7. The electric rotating machine for a vehicle according to
claim 1, wherein said turning angle detector is a resolver.

8. The electric rotating machine for a vehicle according to
10 claim 2, wherein said turning angle detector is a resolver.

9. The electric rotating machine for a vehicle according to
claim 3, wherein said turning angle detector is a resolver.